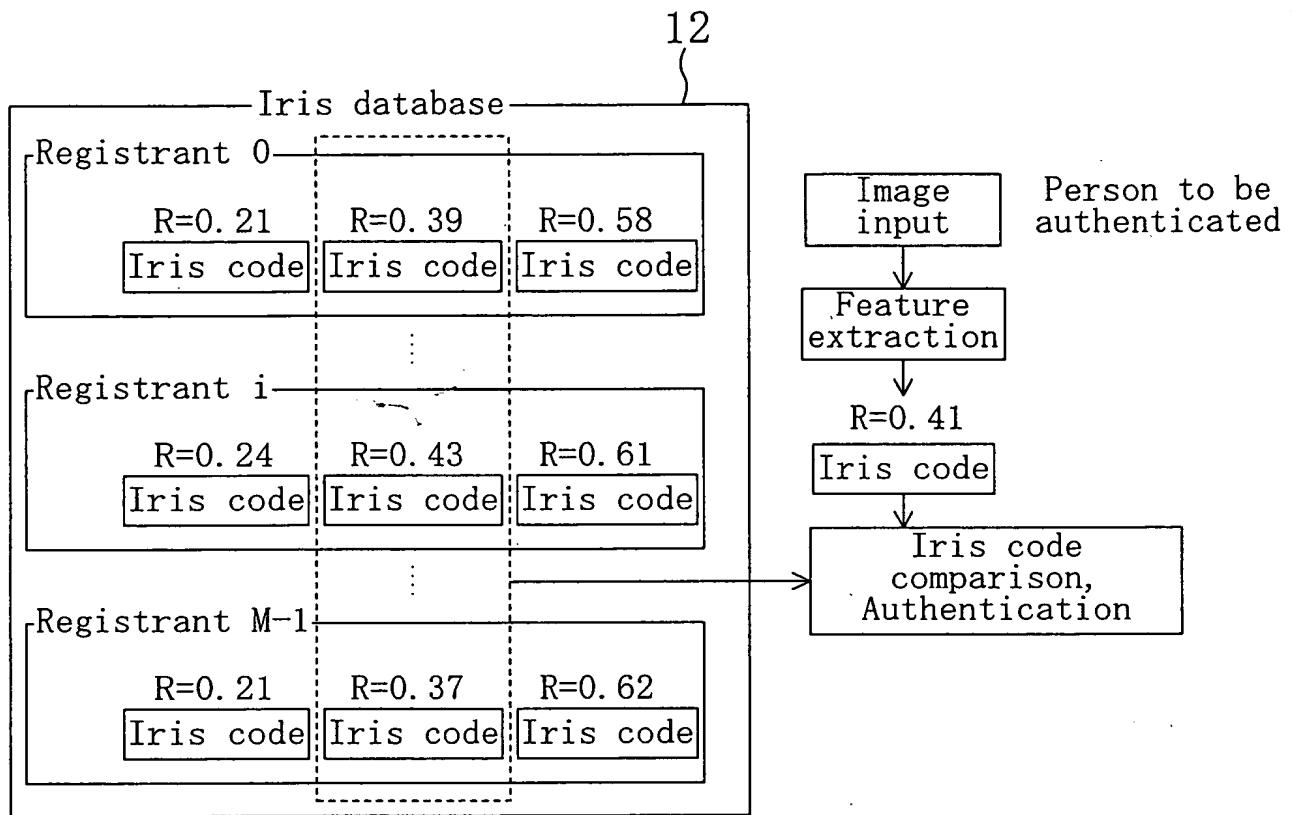


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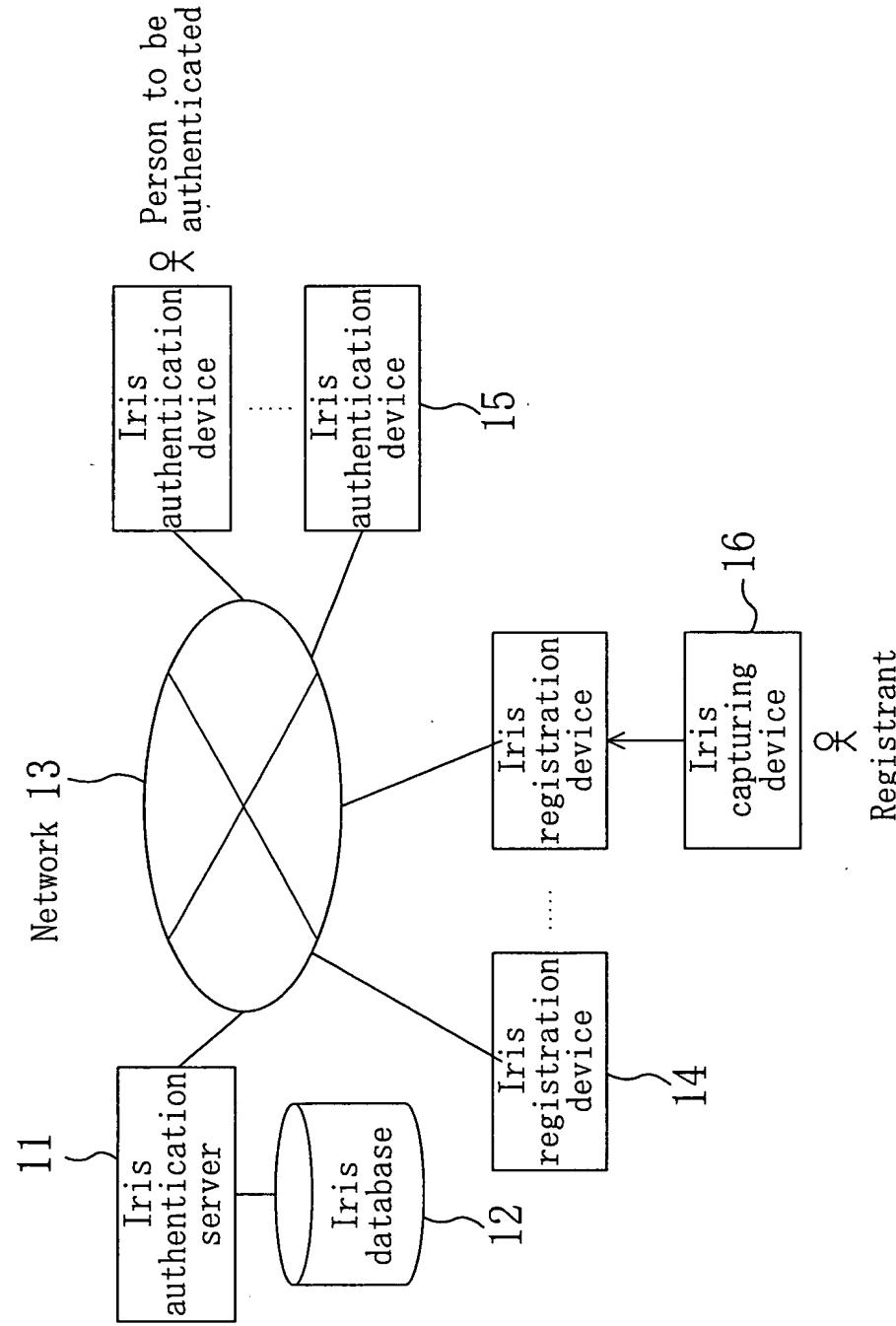
FIG. 1



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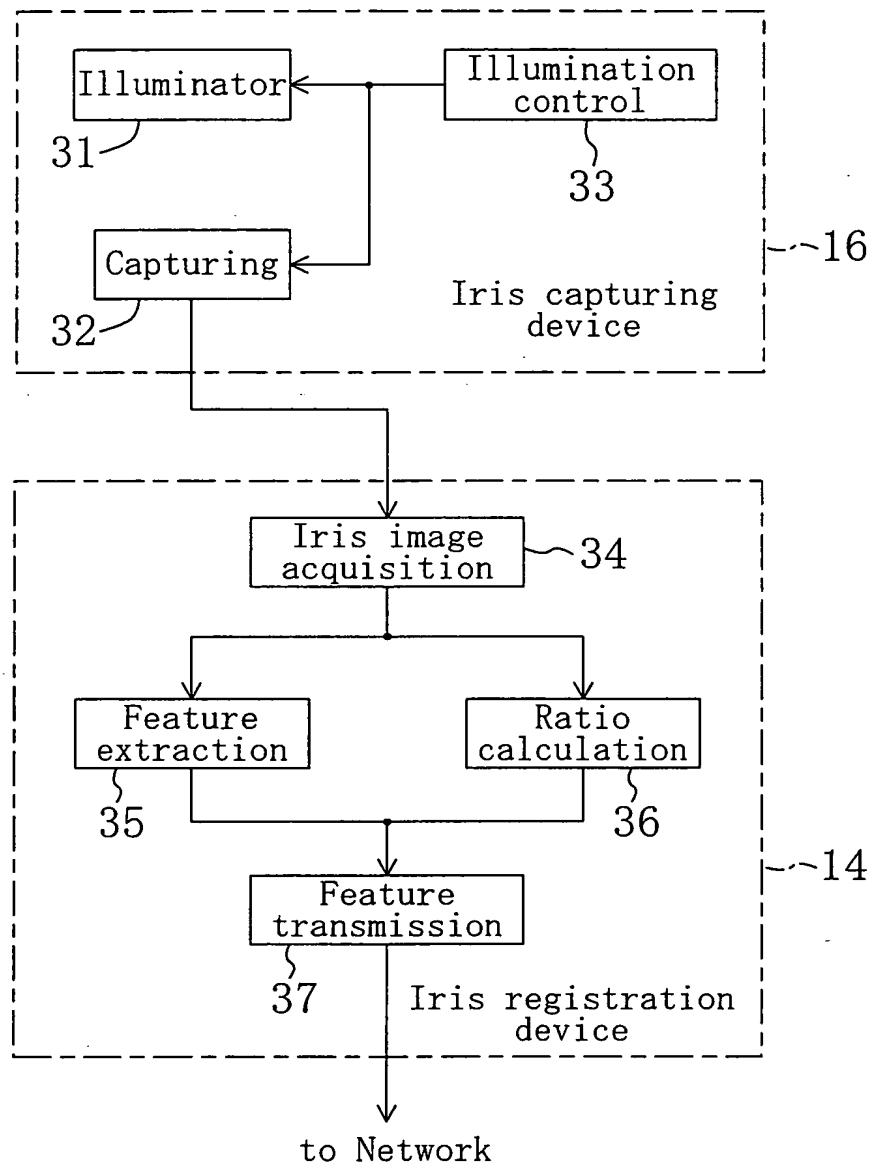
FIG. 2

Authentication system



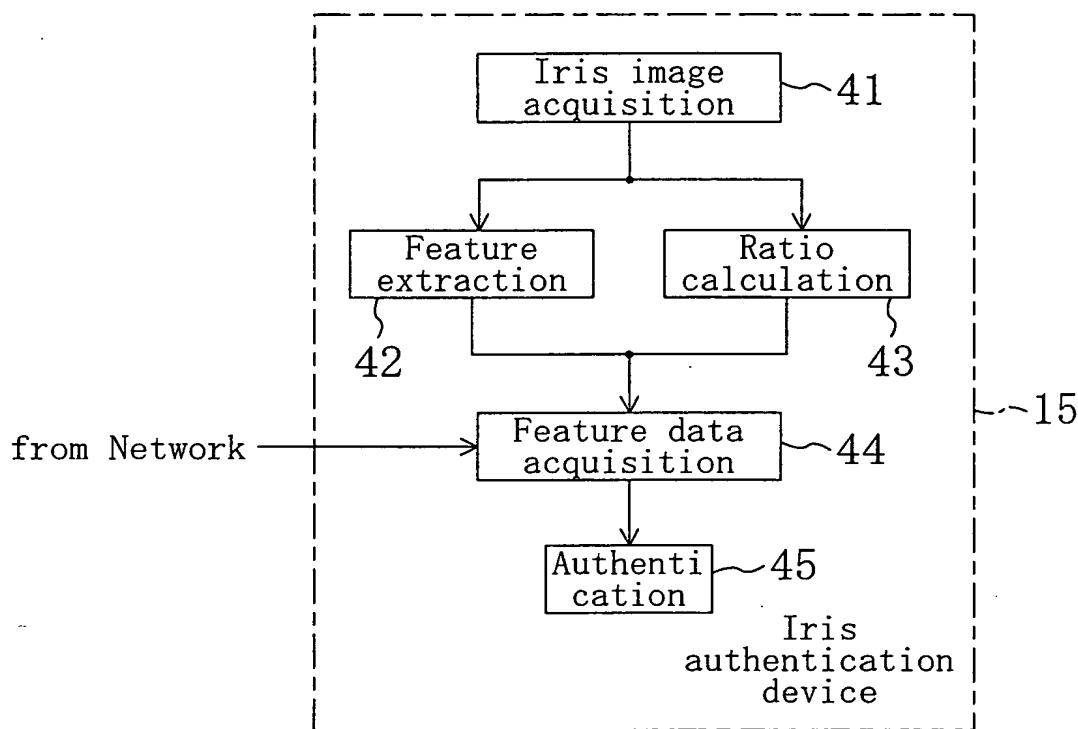
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FIG. 3



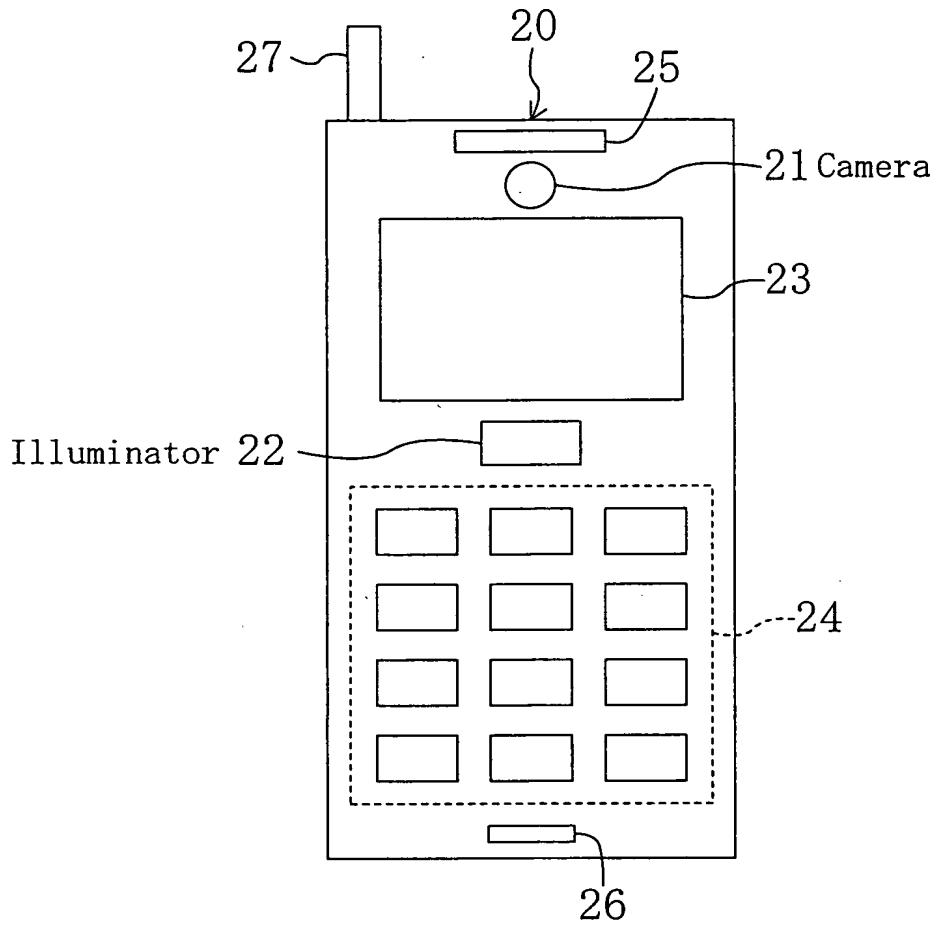
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FIG. 4



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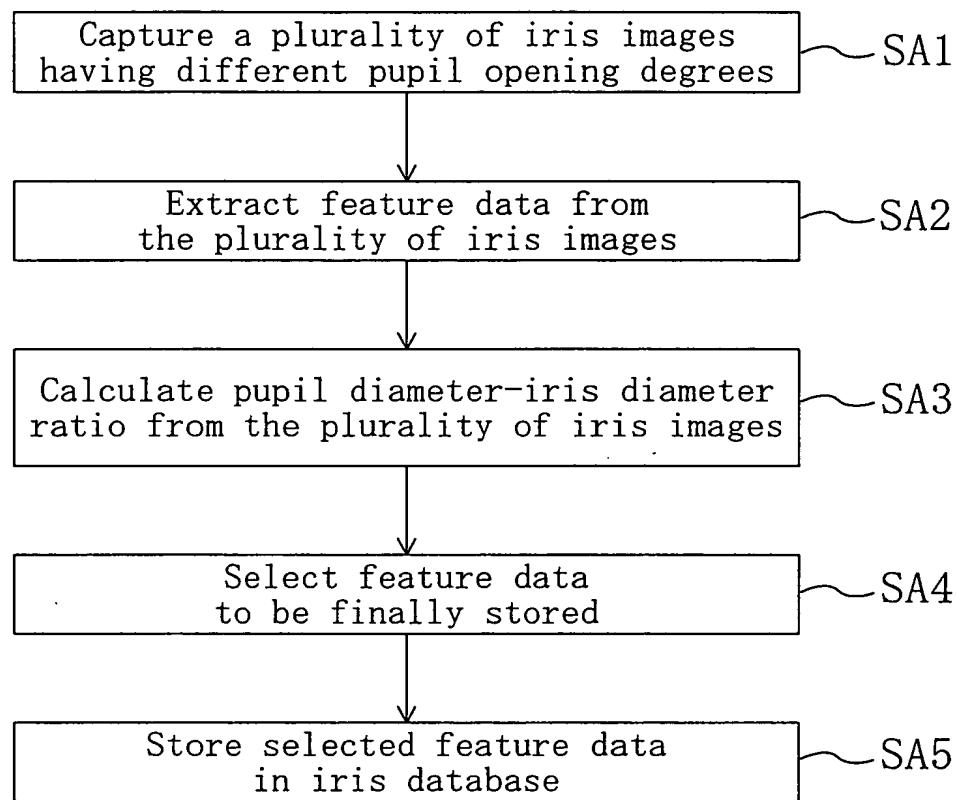
FIG. 5



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FIG. 6

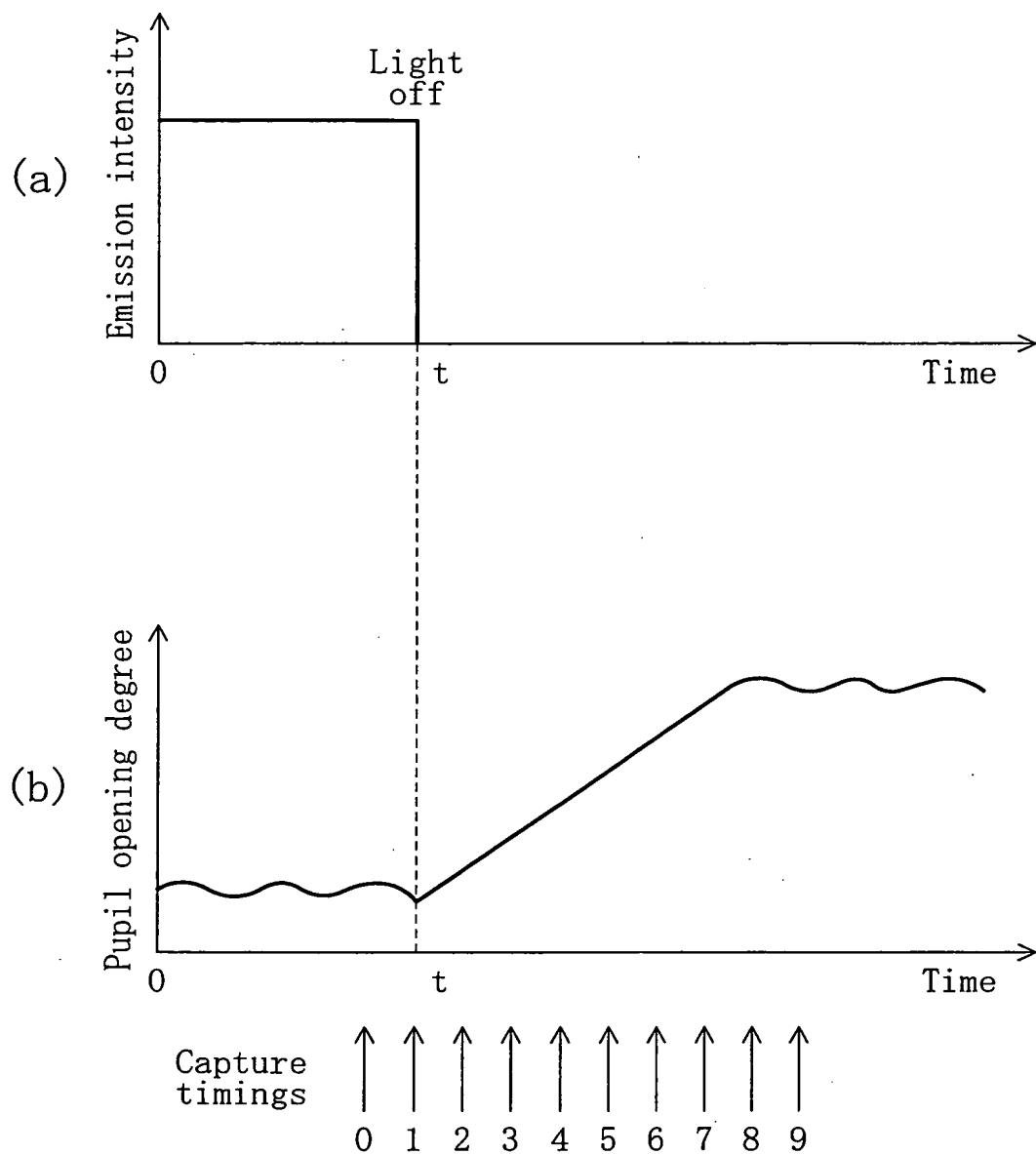
Registration process



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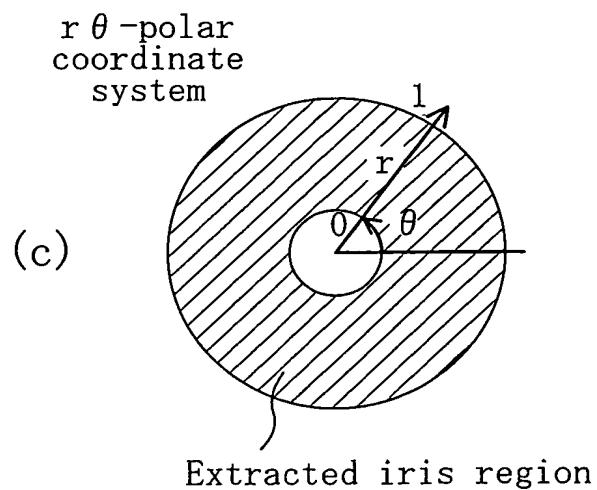
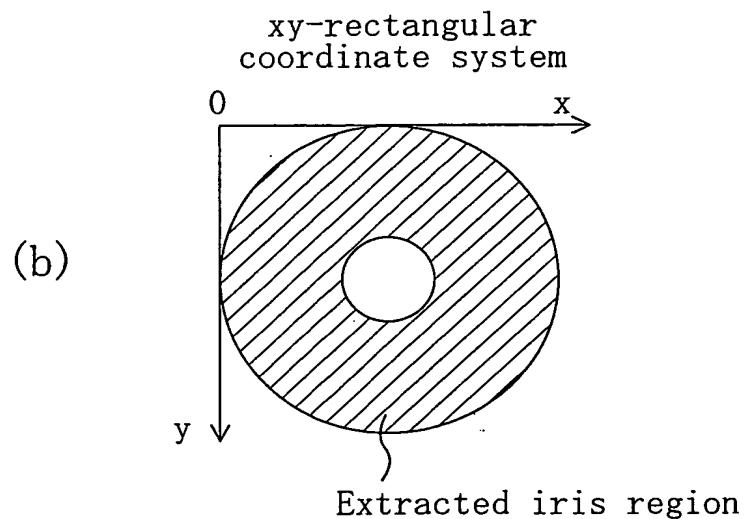
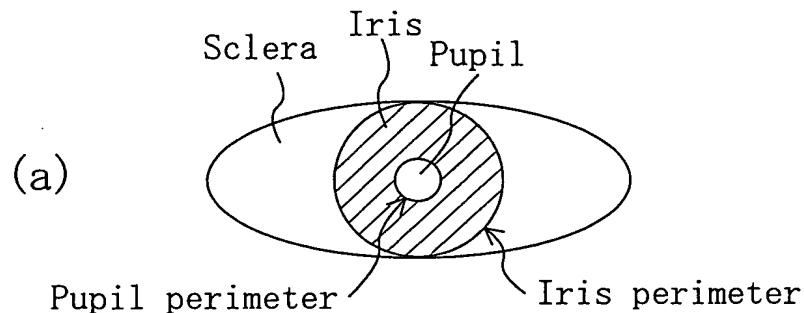
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FIG. 7



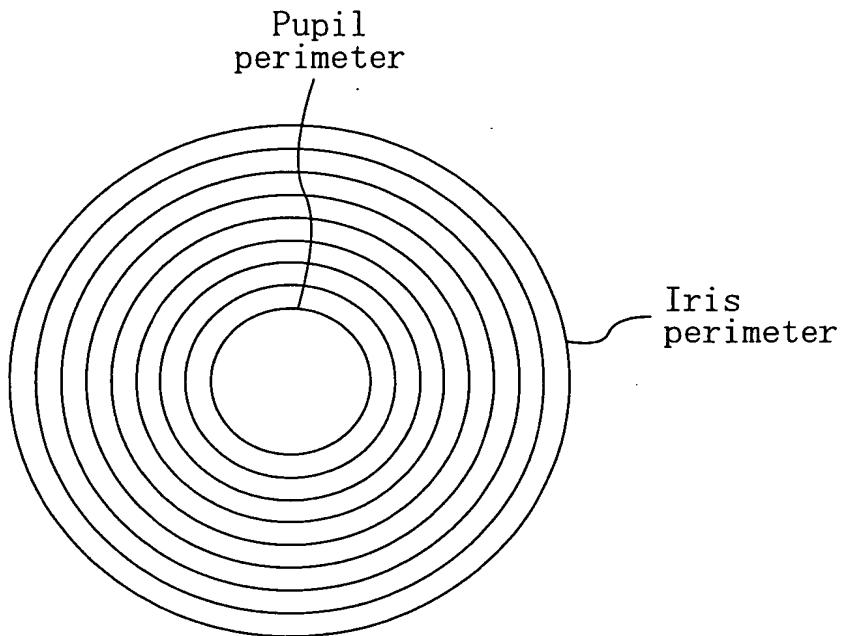
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FIG. 8



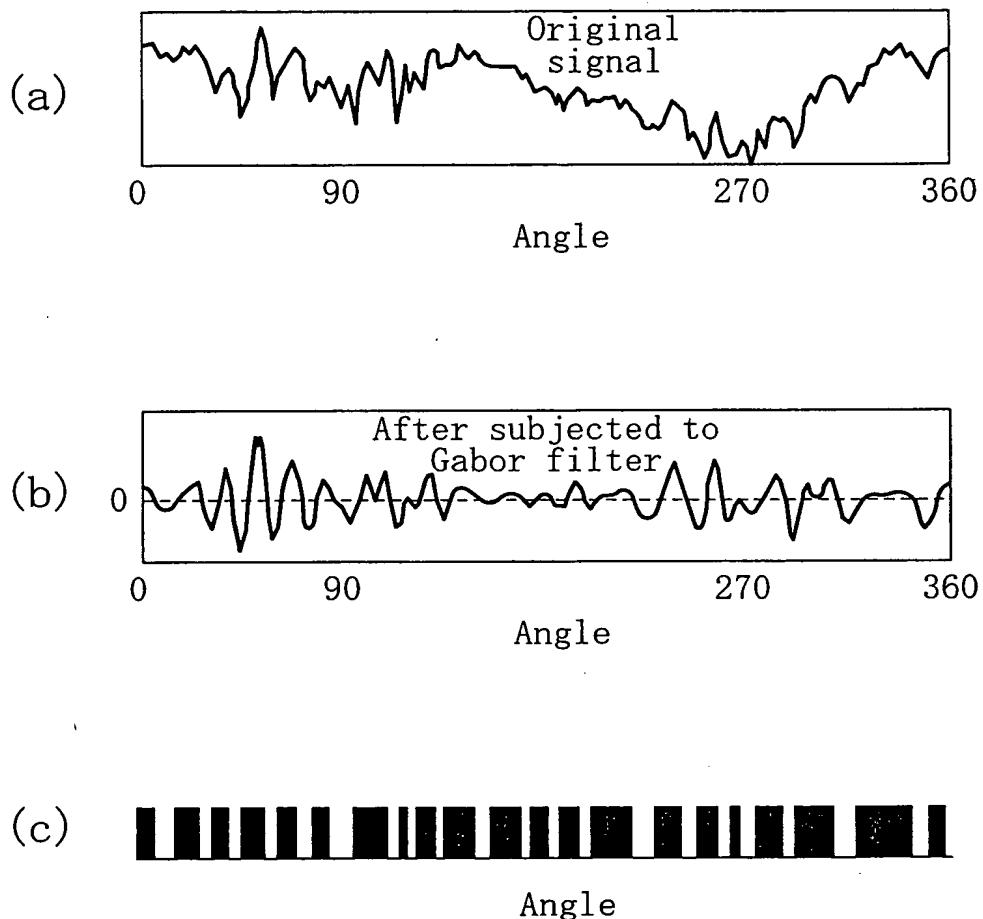
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FIG. 9



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FIG. 10

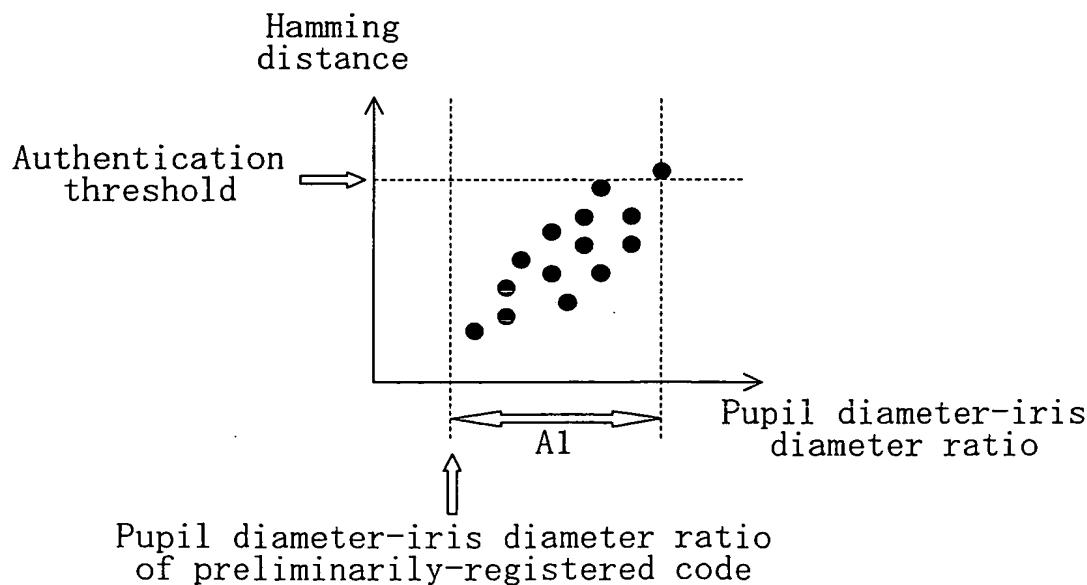


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FIG. 11

Code No.	0	1	2	3	4	5	6	7	8	9
0		0.15	0.20	0.24	0.31	0.34	0.38	0.41	0.42	0.41
1			0.16	0.22	0.24	0.32	0.37	0.38	0.40	0.42
2				0.14	0.21	0.26	0.30	0.34	0.37	0.39
3					0.13	0.18	0.24	0.29	0.37	0.40
4						0.16	0.22	0.28	0.31	0.36
5							0.13	0.19	0.24	0.28
6								0.14	0.21	0.24
7									0.15	0.19
8										0.12
9										

FIG. 12



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FIG. 13

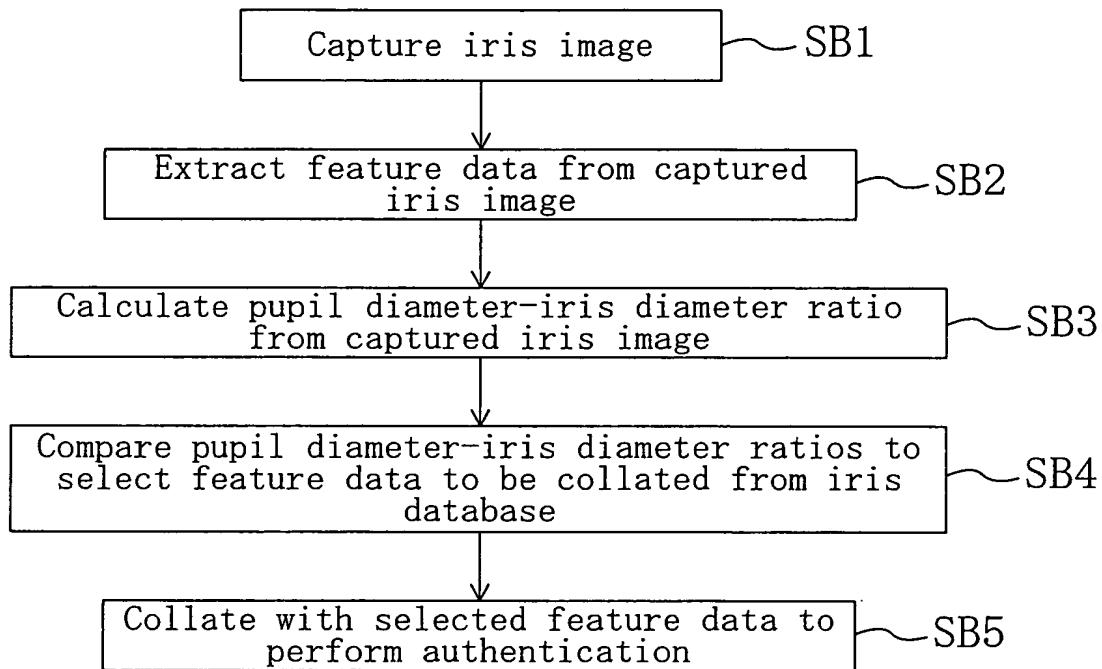
Iris code No.	Registrant No.	Pupil diameter-iris diameter ratio
00000	00000	0. 21
00001	00000	0. 39
00002	00000	0. 58
00003	00001	0. 19
00004	00001	0. 42
00005	00001	0. 61
...	...	...
N-1	M-1	0. 62

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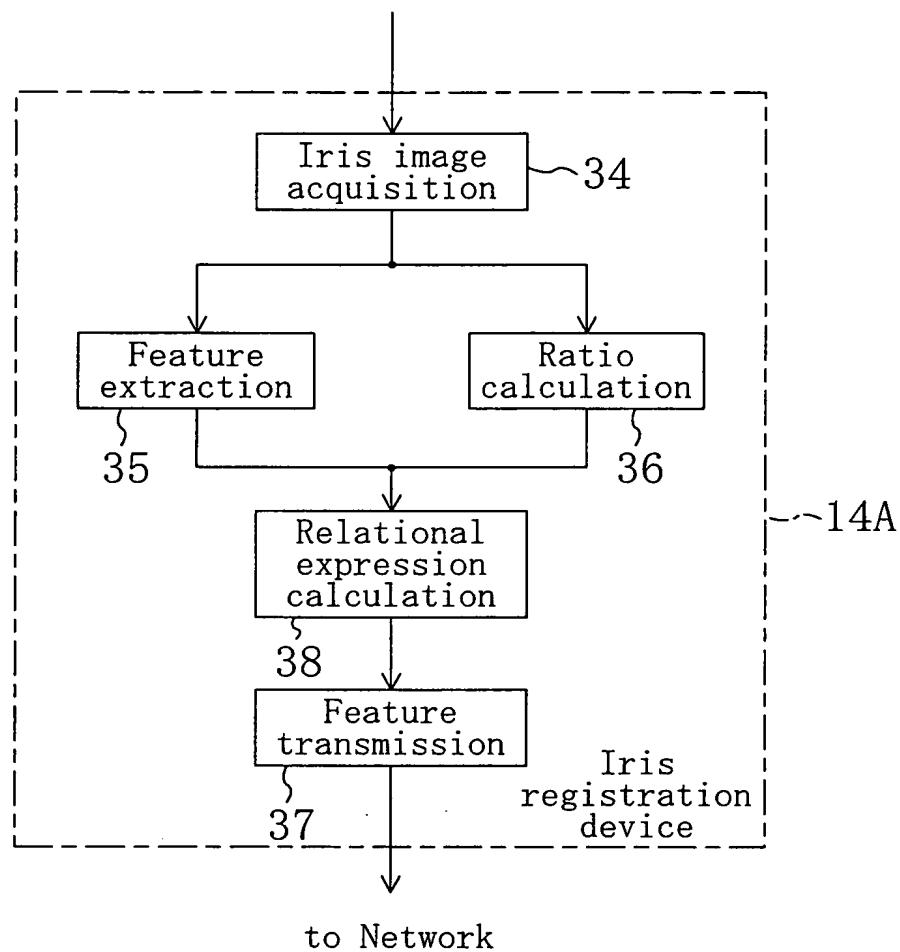
FIG. 14

Authentication process



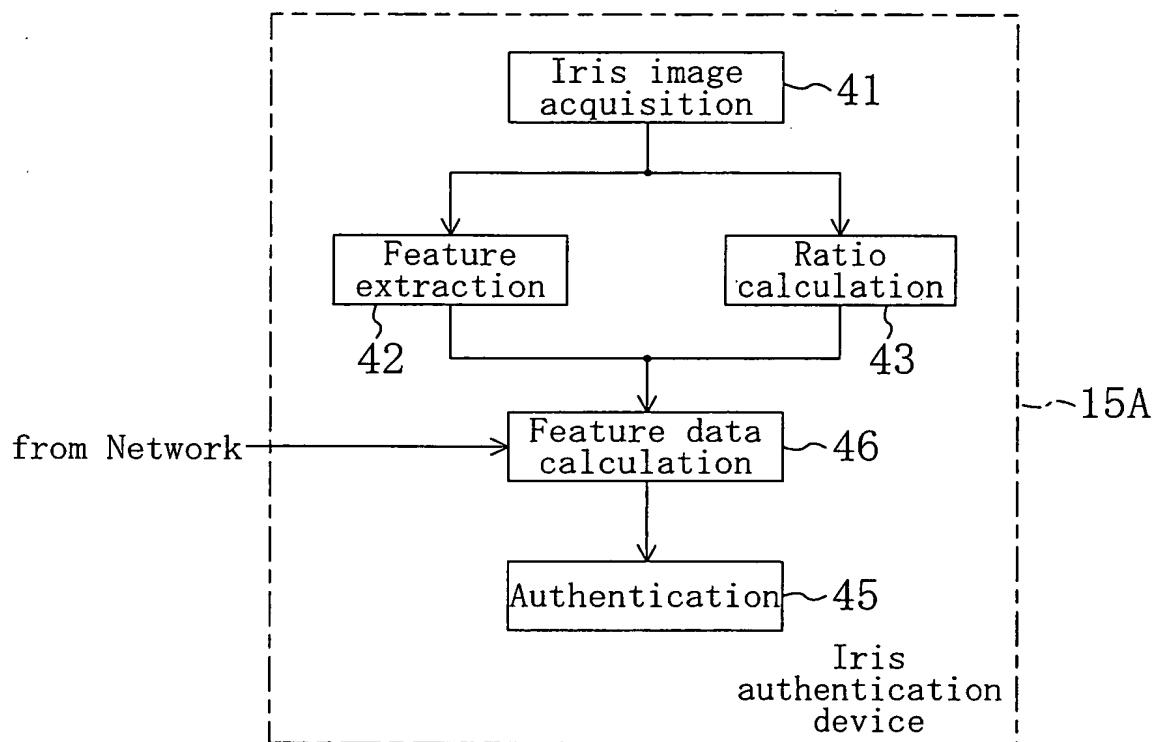
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FIG. 15



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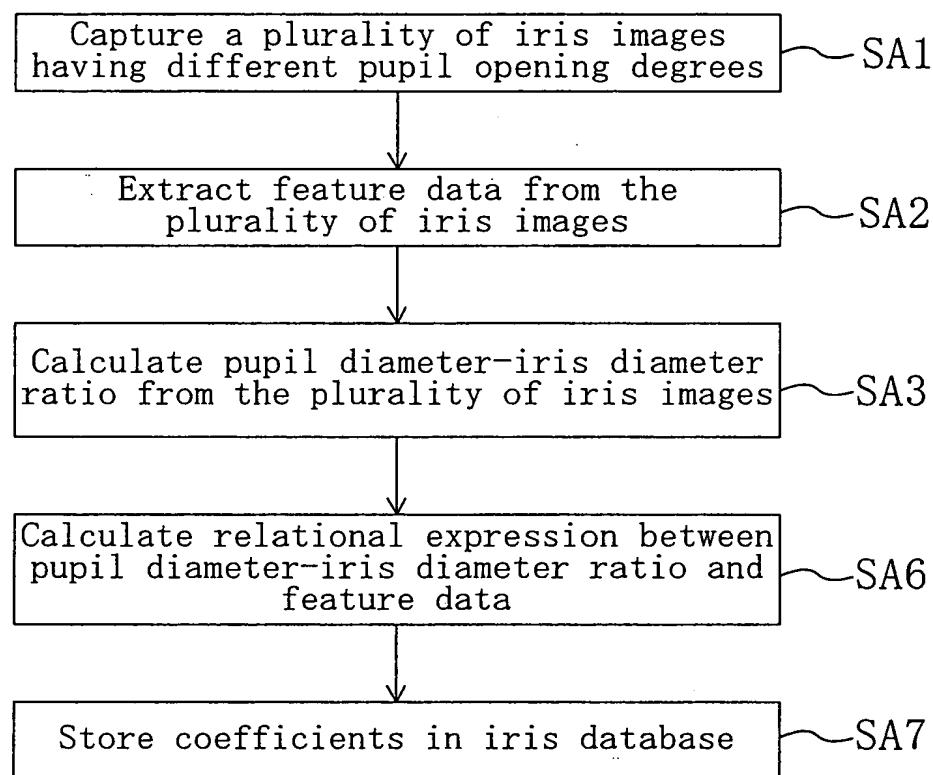
FIG. 16



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FIG. 17

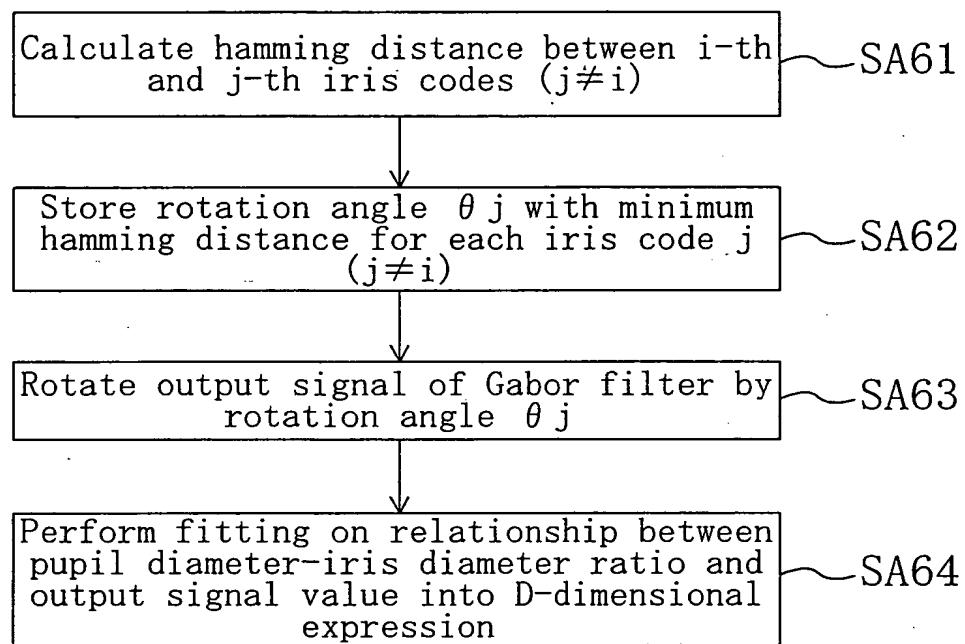
Registration process



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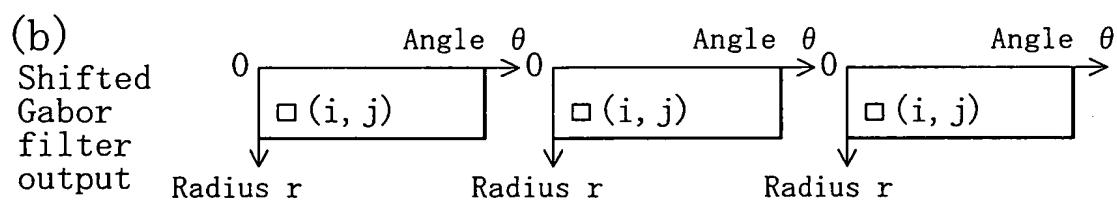
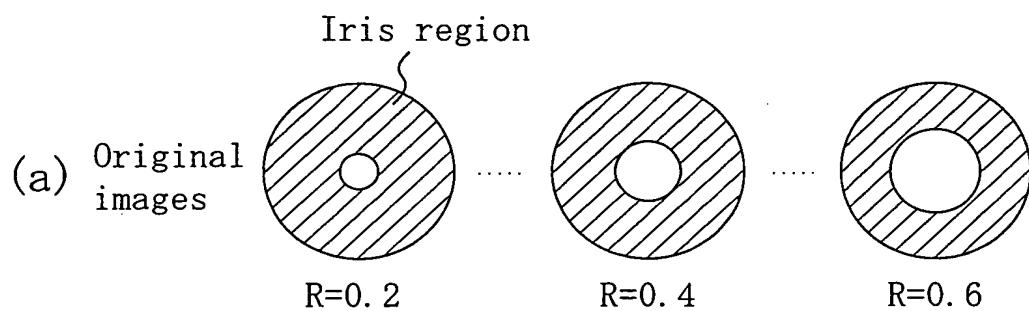
FIG. 18

SA6

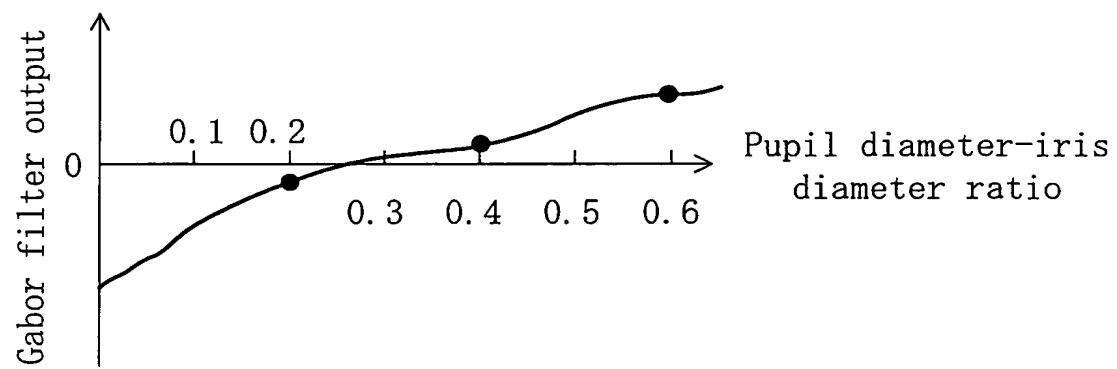


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FIG. 19



(c) Variation in Gabor filter output at specific coordinate  $(i, j)$



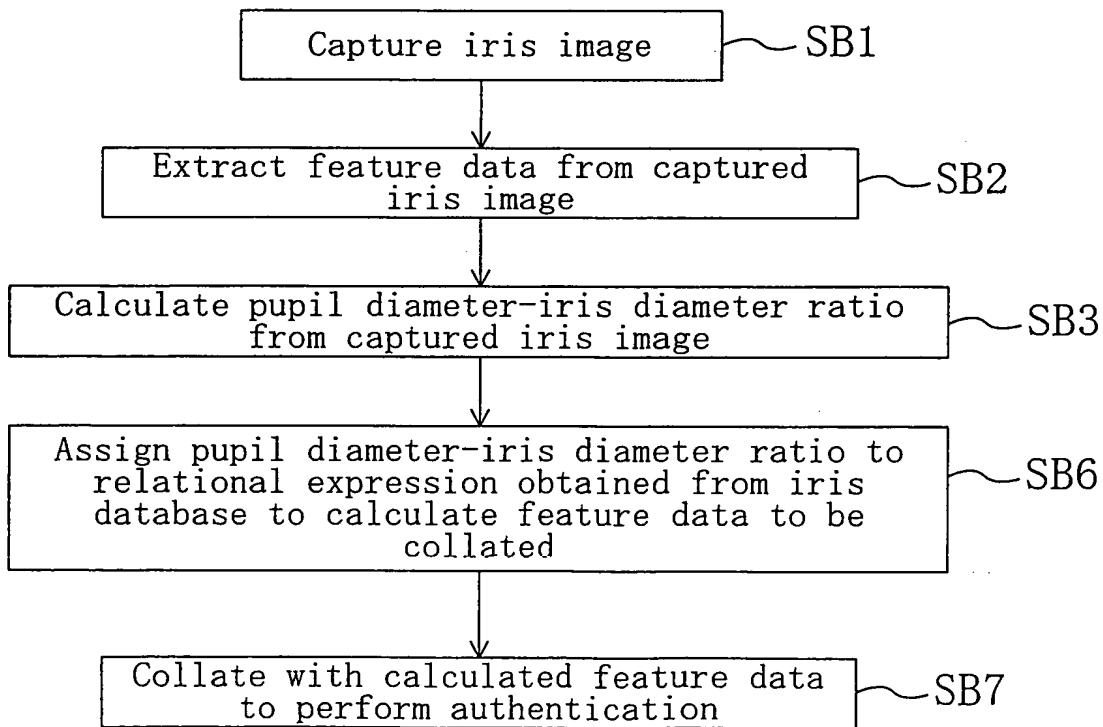
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FIG. 20

Feature data No.	Registrant No.	Parameters
00000	00000	$a_{0,0} \sim a_{0,z-1}, b_{0,0} \sim b_{0,z-1}, c_{0,0} \sim c_{0,z-1}, d_{0,0} \sim d_{0,z-1}$
00001	00001	$a_{1,0} \sim a_{1,z-1}, b_{1,0} \sim b_{1,z-1}, c_{1,0} \sim c_{1,z-1}, d_{1,0} \sim d_{1,z-1}$
00002	00002	$a_{2,0} \sim a_{2,z-1}, b_{2,0} \sim b_{2,z-1}, c_{2,0} \sim c_{2,z-1}, d_{2,0} \sim d_{2,z-1}$
...	...	...
N-1	N-1	$a_{N-1,0} \sim a_{N-1,z-1}, b_{N-1,0} \sim b_{N-1,z-1}, c_{N-1,0} \sim c_{N-1,z-1}, d_{N-1,0} \sim d_{N-1,z-1}$

FIG. 21

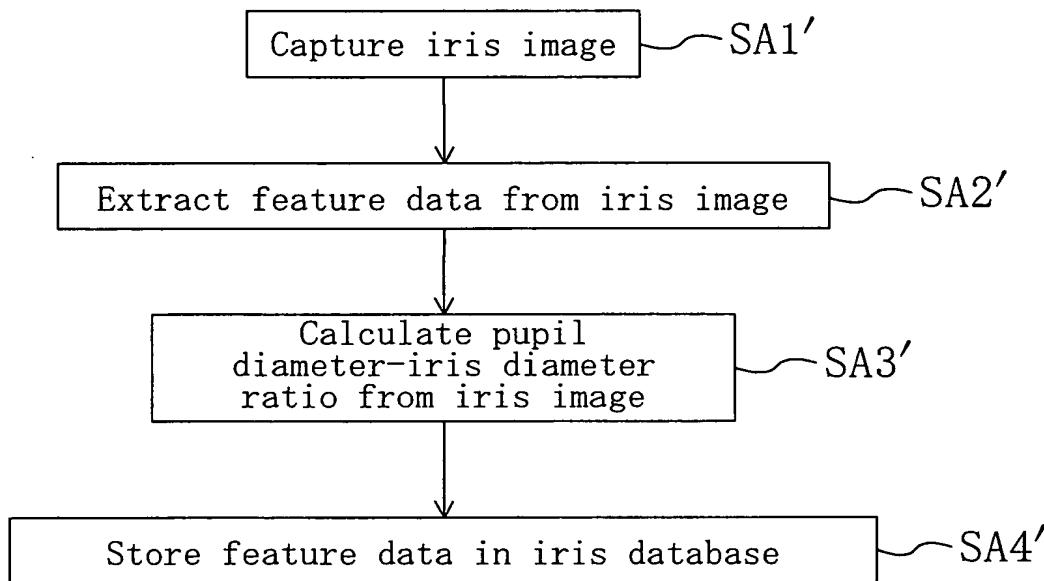
Authentication process



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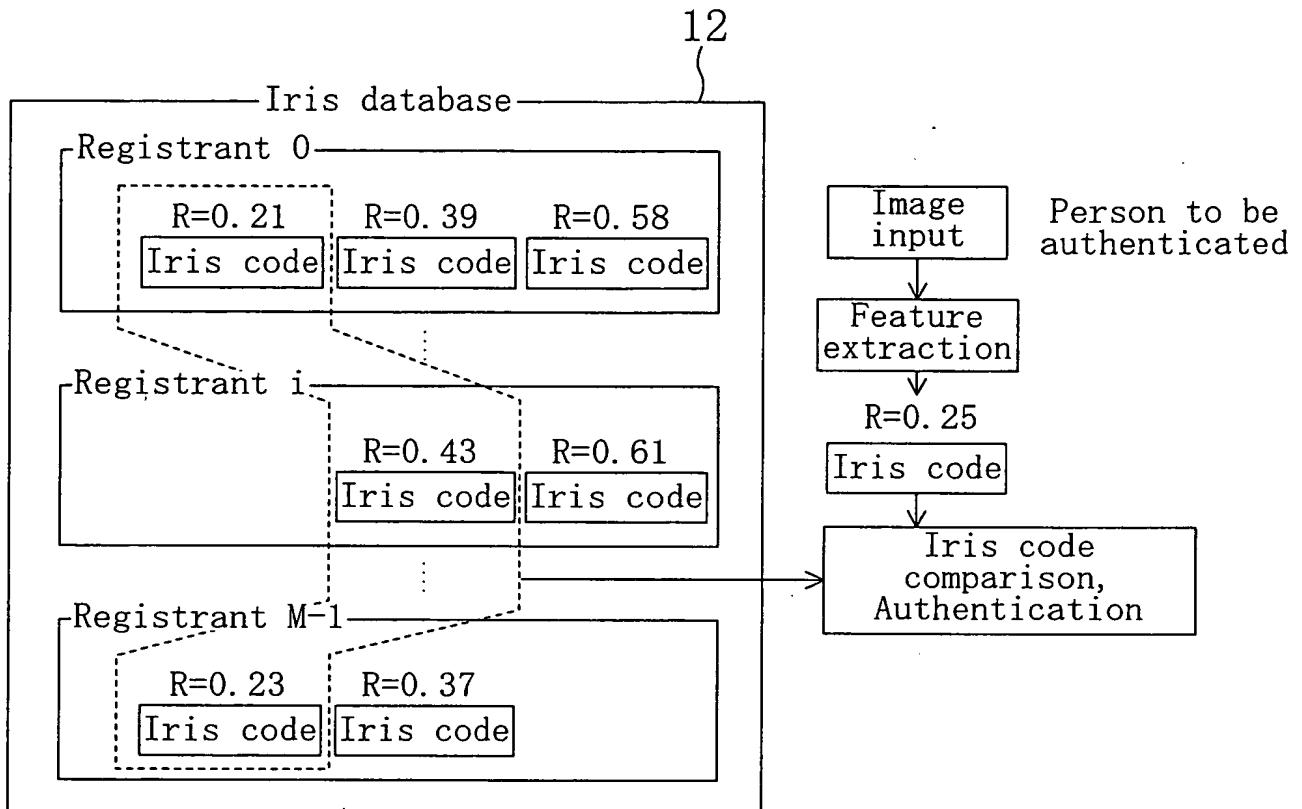
FIG. 22

Registration process



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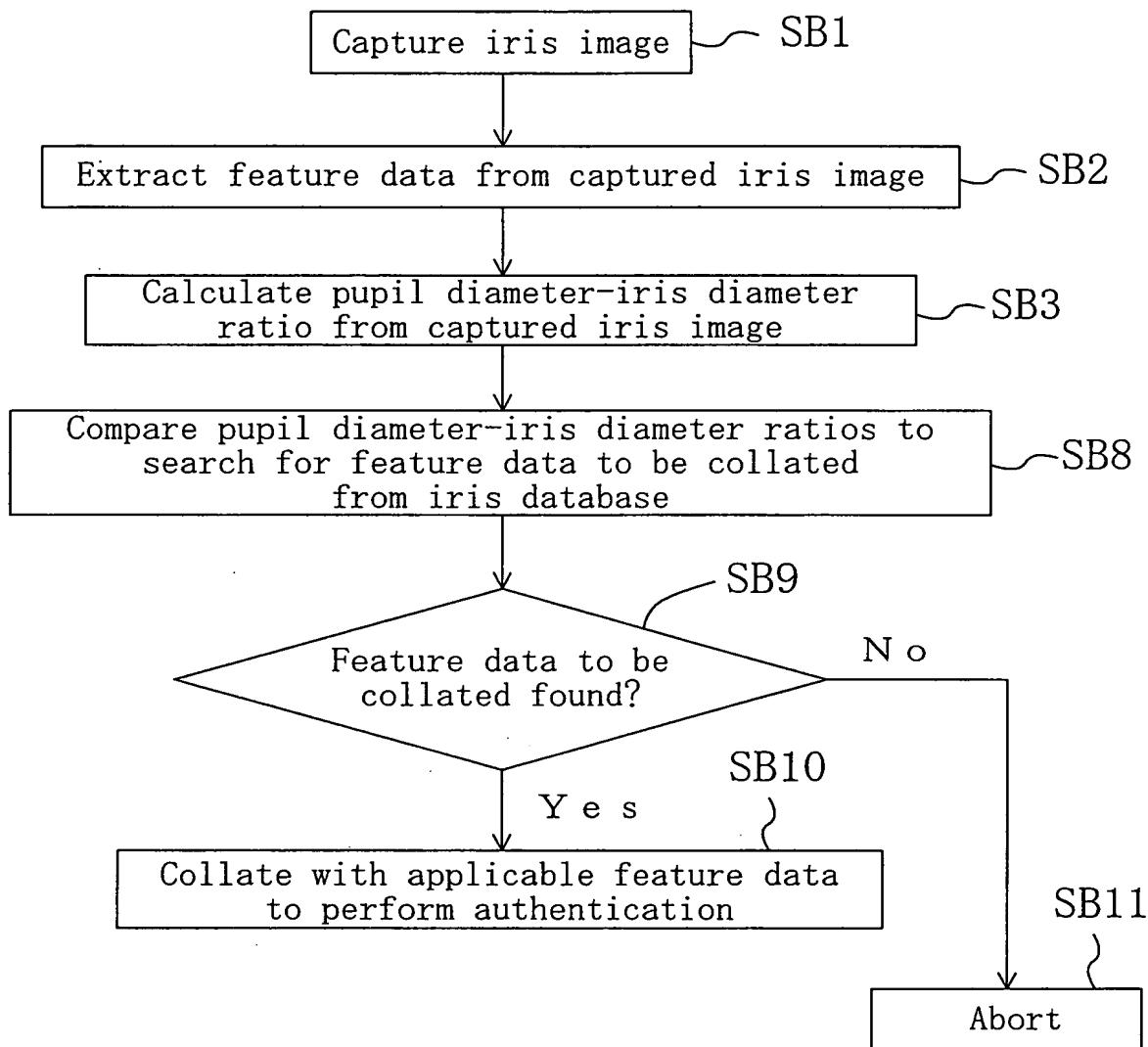
FIG. 23



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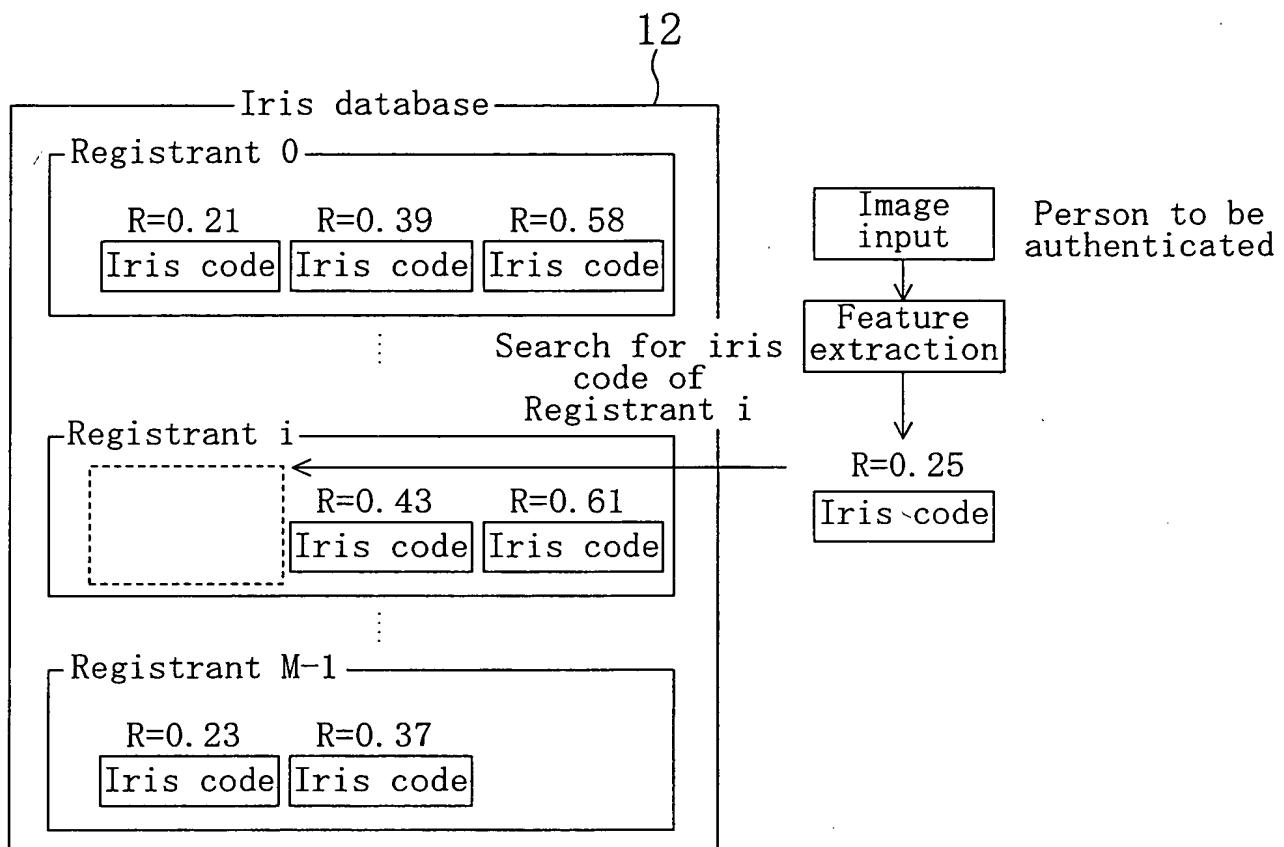
FIG. 24

Authentication process



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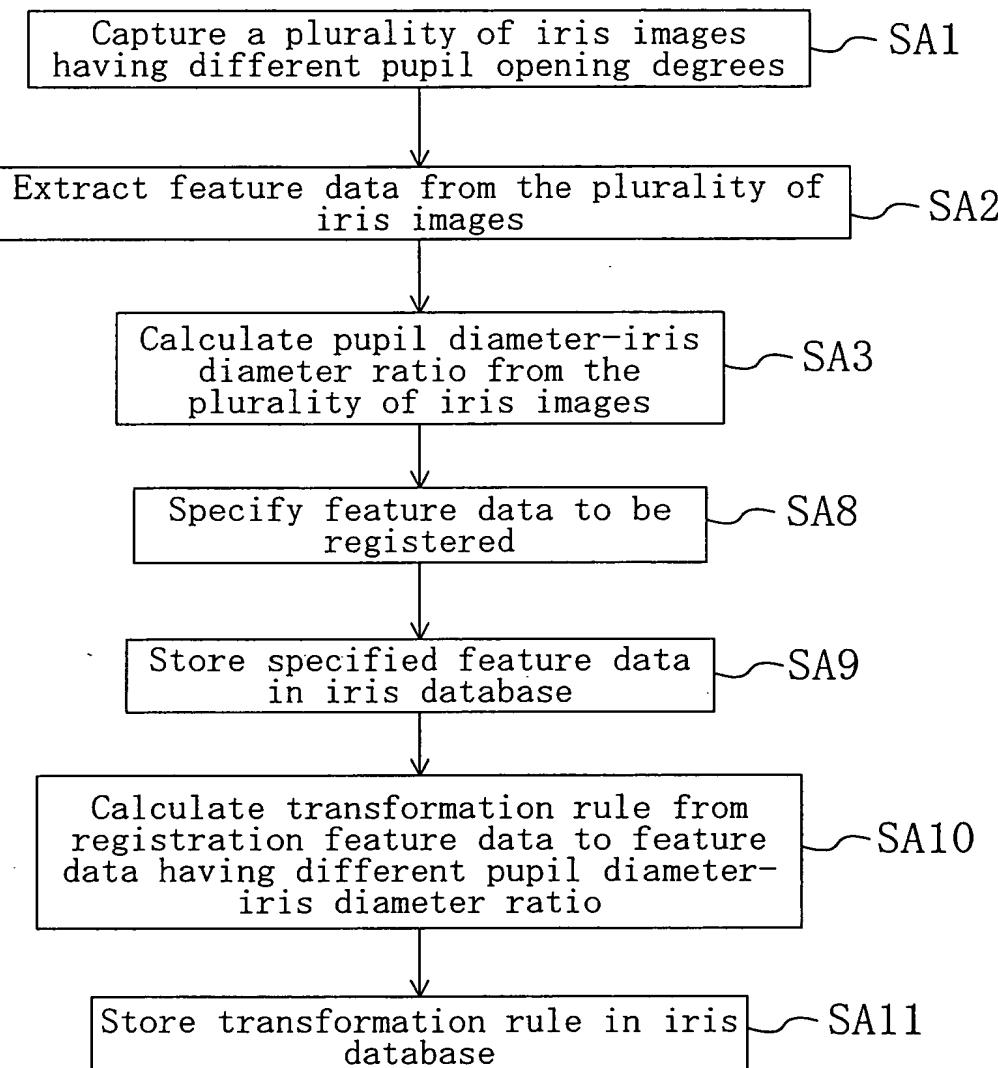
FIG. 25



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FIG. 26

Registration process

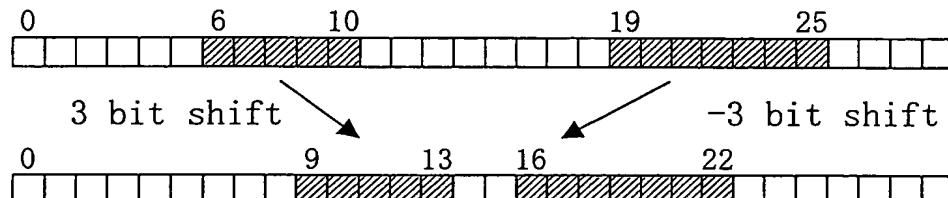


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FIG. 27

Iris code of pupil diameter-iris diameter ratio R0



Iris code of pupil diameter-iris diameter ratio R1

FIG. 28

Registration code ID	Pupil diameter-iris diameter ratio in authentication process	Transformation rule
0	R0	<ul style="list-style-type: none"><li>• Shift Ath to Bth bits by C bits</li><li>• Shift Dth to Eth bits by F bits</li><li>...</li></ul>
	R1	<ul style="list-style-type: none"><li>• Shift Gth to Hth bits by I bits</li><li>...</li></ul>
...	...	...
i	...	...
	...	...

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FIG. 29

Authentication process

